CHAPTER III.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

DEPARTMENTAL OPERATIONS.

59. A comparative statement of timber and firewood departmentally worked during the year is as follows :—

No.	Division.	Year.	In Cubic feet.	
			Timber.	Firewood.
1	North Thánáá	1895-96	10,485	37,143
2	South Thánáá			
3	Central Thánáá...	1896-97	25,314	26,961
4	Surat	1895-96	46,109	826
		1896-97	86,190	20,900
5	Panch Mahálś	1895-96	44,861	104,480
		1896-97	6,423	69,715
	Total ...	1895-96	101,455	142,449
		1896-97	117,927	117,576

60. It has been impossible to compare the figures by Divisions in the Thánáá District owing to the change from two to three Divisions effected in the middle of the working season. The details by Divisions for the current season are given in tabular form to facilitate comparison next year :—

Division.	In Cubic feet.	
	Timber.	Firewood.
North Thánáá	9,375	17,714
Central Thánáá...	8,985	.....
South Thánáá	6,954	9,247½
Total ...	25,314	26,961½

These figures represent the outturn of wind-falls and of line-cutting in North Thánáá. Notwithstanding that some coupes remained unsold, it was not found necessary to work them departmentally.

61. In Surat the figures represent the outturn of the line-cutting on the Gáikwári border.

And in Panch Mahálś they also represent line-cutting The agricultural depôts having failed, as they were bound to fail as they have always failed whenever tried, no wood to stock them was cut; hence the large decrease in this Division.

62. The following is an abstract of the details given in Form No. 59 :—

Number.	Division.	Balance on 1st July 1896.			Outturn of the year.			Total of columns 5 and 8.	Disposed of during the year.			Balance on the 30th June 1897.		
		Timber.	Fire-wood.	Total.	Timber.	Fire-wood.	Total.		Timber.	Fire-wood.	Total.	Timber.	Fire-wood.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
1	North Thána ...	...	500	500	9,375	17,714	27,089	27,589	8,090	18,180	26,270	1,285	34	1,319
2	Central Thána ...	1,569	...	1,569	8,985	...	8,985	10,554	9,619	...	9,619	935	...	935
3	South Thána ...	...	...	...	6,954	9,247½	16,201½	16,201½	6,954	9,247½	16,201½	...	...	...
4	Surat	6,604	...	6,604	86,190	20,900	107,090	113,694	71,847	4,600	76,447	20,947	16,300	37,247
5	Panch Mahals ...	16,916	49,815	66,731	6,423	69,715	76,138	142,869	12,923	100,346	113,269	10,416	19,184	29,600
	Total ...	25,089	50,315	75,404	117,927	117,576½	235,503½	310,907½	109,433	132,373½	241,806½	33,583	35,518	69,101

REMOVAL OF PRODUCE BY PURCHASERS.

63. As recorded in paragraph 28, 275 coupes were marked for felling in Thána; of these 227 only found purchasers, but in a few cases offers having been received for old coupes left unsold, 15 such were sold for exploitation, making 242 coupes exploited in all.

The result of this exploitation as compared with the timber exploitation of last year were as follows :—

No.	Division.	Coupes exploited.							
		1895-96.				1896-97.			
		Number.	Area.	Receipts.	Average price per Acre.	Number.	Area.	Receipts.	Average price per Acre.
			Acres.	Rs.	Rs. a. p.		Acres.	Rs.	
1	North Thána	90	5,147	2,25,045	43 8 0	87	4,639	1,80,271	38·9
2	South Thána	75	4,024	1,14,215	27 8 0	75	4,113	87,134	21·1
3	Central Thána... ...	75	3,781	1,32,369	35 0 0	80	4,615	1,17,395	25·4
	Total ...	240	12,952	4,71,659	36·4	242	13,367	3,84,800	28·5

64. It will be noted that there is a falling off of over 20 per cent. in the rate per acre realized. Besides the inevitable effects of the plague in Bombay and famine up-country—the former meaning difficulty in getting money owing to the money-lenders having fled from Bombay, and the latter that, as well as a reduced market there was an increase in the expense. Some of this decrease must undoubtedly be put down to increased efficiency of protection and number and quality of reserves. For the year's working an amended form of contract was adopted drawn under rules under the Forest Act. This gave summary power of fining to the Divisional Forest Officer and acted as a deterrent with those inclined to fraud. There were no serious cases of theft of reserved trees as last year.

65. The gross produce yield of the coupes worked is estimated by the Divisional Forest Officer as follows :—

No.	Division.	Timber in Cubic feet.		Firewood, Cubic feet.
		Teak.	Junglewood.	
1	North Thána	435,626	153,640	1,336,421
2	South Thána	373,574	58,897	832,031
3	Central Thána	277,809	97,039	657,781
	Tolal, 1896-97 ...	1,087,009	309,576	2,826,233
	Total, 1895-96 ...	2,224,186	533,690	8,771,765

The great difference of these figures as compared with those of last year will be noted. I recorded my opinion on the accuracy of the figures given in paragraph 97 of last year's report and have also referred to the subject *ante* paragraph 29. The figures given in past years were based on an imperfect registration of actual yield of material and, moreover, the system of conversion into cubic feet also varied in the several Divisions. As recorded a common system of classification for the three Thána Divisions was adopted in the past season and to a certain extent was introduced, and at the same time co-efficients of conversion of these classes into cubic feet were discussed and adopted by all the Divisional Forest Officers. That these classes are the best possible or the co-efficients accurate cannot be claimed, but they represent a beginning and by means of experiments and by experience they can be corrected year by year. The classes and co-efficients actually adopted for this report may usefully be recorded here for further reference. They are as follows :—

A. 10′ long or under = "Kadis."
   - *a.* Below 20″ girth = III reckoned as 1 cubic foot.
   - *b.* Between 20″ and 30″ girth = II reckoned as 3 cubic feet.
   - *c.* Between 30″ and 40″ girth = I reckoned as $5\frac{1}{2}$ cubic feet.

B. Over 10′ long = Rafters or "Wásá."
   - *a.* Below 20″ girth = III reckoned as 2 cubic feet.
   - *b.* Between 20″ and 30″ = II reckoned as 6 cubic feet.
   - *c.* Between 30″ and 40″ = 1 reckoned as 11 cubic feet.

C. Logs over 40″ in girth are actually measured and cubic contents calculated.

D. Firewood is calculated at 17 solid cubic feet per cart-load.

66. It has been arranged to collect further data of comparative girth at base and centre of log, for as the former is that necessarily taken and recorded, it is necessary, in order to increase the accuracy of the co-efficient of cubic contents, to obtain a reliable co-efficient to reduce the recorded base girth to the probable centre girth.

67. There were no cuttings in Málki lands pending a reference which was before Government.

Surat.

68. The timber and firewood removed by purchasers was as follows:—

Year.	Timber.	Firewood.
	Cubic ft.	Cubic ft.
1895-96	106,466	76,085
1896-97	30,714	39,460

In addition to the above 528 teak trees were sold at one rupee per tree growing on occupied lands in the Chikhli and Bulsár Ranges and in the Mándvi Range at a valuation.

Panch Mahals.

69. The outturn in this Division was entirely from teak timber sold standing on Government waste and occupied lands outside forests. The quantity of the outturn was as follows :—

Year.	Timber.	Firewood.
	Cubic ft.	Cubic ft.
1895-96	421,862	120,512
1896-97	631,788	137,790

Bamboos.

70. The following is a comparison of the out-turn in the years 1895-96 and 1896-97 :—

No.	Division.	1895-96.				1896-97.			
		Cart-loads.	Head-loads.	Number.	Receipts.	Cart-loads.	Head-loads.	Number.	Receipts.
					Rs.				Rs.
1	North Tháná ...	497	1,190	10,664	687	3,727	3,018	227,050	10,277
2	South Tháná... ...	5,247	5,522	1,193,719	17,242	370	559	4,102	302
3	Central Tháná ..	...	...	.....	...	961	686	1,092,756	3,613
4	Surat	...	...	567,870	16,016	...	...	360,454	19,949
5	Panch Mahál ...	2	...	33,225	518	15	...	63,224	1,115
	Total ...	5,746	6,712	1,805,478	34,463	5,073	4,263	1,747,586	35,256

In the Surat Division nearly 2 lács of bamboos sold from the Dáng forests were not exploited on account of the plague at Bulsár, which town is the centre where bamboos from the Dángs are taken for local sale as well as export. On the representation of the contractors I was obliged to extend the contracts to the current year. The work of the contractors was handicapped by the refusal of cart-men to remove the bamboos to the Bulsár bunder, where the plague was raging in consequence of which quarantine was imposed.

Minor Produce.

71. The following statement shows the minor produce disposed of during the year compared with that of the last year :—

Number.	Division.	Year.	
		1895-96.	1896-97.
1	North Tháná	6,226	625
2	South Tháná		4,216
3	Central Tháná ...		1,690
4	Surat	2,759	2,852
5	Panch Mahál ...	475	172
	Total ...	9,460	9,555

FREE GRANTS OF FOREST PRODUCE.

72. The following statement shows the free grants of timber made during the year compared with those of the last year :—

Number.	Division.	Year.	
		1895-96.	1896-97.
1	North Tháná... ...	24	40
2	South Tháná	207	1,072
3	Central Tháná ...	113	265
4	Surat	1,686	3,007
5	Panch Mahál ...	2,525	31
	Total ...	4,555	4,415

The total value varies but little from that of last year, the variation in distribution is caused by the greater or less prevalence of fires in particular districts.

72(*a*). The following form contains the information regarding value of produce removed under rights or granted free or at reduced rates as required by Government Resolution No. 4296, dated 8th June 1897 :—

	Timber.		Fuel.		Bamboos.		Grazing.	Minor produce.	Total.
	Cubic feet.	Value.	Cubic feet.	Value.	Cubic feet.	Value.			
		Rs.		Rs.		Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.
					Right-holders.				
North Thánáá	...	...	991,996	23,299	52,040	981	42,806 0 0	1,260 0 0	68,346 0 0
Central Thaná... ...	...	...	...	...	...	...	.....	.....	.....
South Thánáá	...	...	22,550	5,468	...	...	4,999 6 0	4,429 8 0	15,896 14 0
Surat	...	...	15,000	400	...	...	82 4 0	500 0 0	982 4 0
Panch Mahálsa... ...	...	...	...	...	...	...	.....	.....	.....
Total ...	...	...	1,029,546	30,167	52,040	981	47,887 10 0	6,189 8 0	85,225 2 0
					Free grants.				
North Thánáá	105	40	...	...	...	...	.....	.....	40 0 0
					Nos.				
Central Thánáá... ...	1,575	265	500,000	50,000	5,000	230	43,511 0 0	2,930 0 0	96,936 0 0
South Thánáá	3,258	1,072	...	...	...	...	48,686 8 0	.....	49,758 8 0
Surat	4,558	3,007	...	...	6,675	240	.....	.....	3,247 0 0
Panch Mahálsa... ...	234	31	...	...	160	3	.....	.....	34 0 0
Total ...	9,730	4,415	500,000	50,000	11,835	473	92,197 8 0	2,930 0 0	1,50,015 8 0
Grand Total ...	9,730	4,415	1,529,546	80,167	63,875	1,454	1,40,085 2 0	9,119 8 0	2,35,240 10 0

CHAPTER IV.

FINANCIAL RESULTS.

73. Financially the year has been a disastrous one. While there has been an excess of Rs. 22,444 in expenditure, receipts have fallen off by 2 lákhs. The following are the figures for the year :—

Year.	Receipt.	Expenditure.		Total.	Surplus.
		A.	B.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1895-96	7,83,283	1,08,221	1,89,216	2,97,437	4,85,846
1896-97	5,83,437	1,26,022	1,93,859	3,19,881	2,63,556
Increase ...	...	17,801	4,643	22,444	...
Decrease ...	1,99,846	...	...	...	2,22,290

74. The whole deficit falls practically under II-A. In Thánáá owing to low prices the sale of coupes produced Rs. 1,20,000 short, while Rs. 12,500 short was collected in Surat owing to the plague interfering with the demand for timber from both the upper and lower Dángs. In the Panch Mahálsa the sales from Málki numbers was also Rs. 64,000 short mainly owing to low